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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/903,081	07/10/2001	Richard E. Demaray	9140.0014-00	1225
22852 7590 09/05/2007 FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			EXAMINER HOFFMANN, JOHN M	
			ART UNIT 1731	PAPER NUMBER
			MAIL DATE 09/05/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/903,081	Applicant(s) DEMARAY ET AL.	
	Examiner John Hoffmann	Art Unit 1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-20, 24-27 and 29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-20, 24-27 and 29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/9/2007 has been entered.

Information Disclosure Statement

The information disclosure statement filed 8/9/07 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because the dates of publication for at least one non-patent document is not provided. From MPEP 609(III) : The date of publication

supplied must include at least the month and year of publication, except that the year of publication (without the month) will be accepted if the applicant points out in the information disclosure statement that the year of publication is sufficiently earlier than the effective U.S. filing date and any foreign priority date so that the particular month of publication is not in issue.

It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the

statement, including all certification requirements for statements under 37 CFR 1.97(e).

See MPEP § 609 ¶ C(1).

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: There is no antecedent basis for “sidewall portion”, “planar portion” of the ridge structure, the “intermediate structure”, the “entire surface of the ridge portion”.

As pointed out in **MPEP 608.01(o)**:

Note that examiners should ensure that the terms and phrases used in claims presented late in prosecution of the application (including claims amended via an examiner's amendment) find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description, see 37 CFR 1.75(d)(1). If the examiner determines that the claims presented late in prosecution do not comply with 37 CFR 1.75(d)(1), applicant will be required to make appropriate amendment to the description to provide clear support or antecedent basis for the terms appearing in the claims provided no new matter is introduced.

As indicated above, examiner could not find any antecedent basis for the language and any support appears to be very unclear. Thus it is deemed that a prima facie showing has been made of lack of clear support or antecedent basis. The burden is now on applicant to demonstrate clear support or antecedent basis for the claim language.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the

art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 14-20, 24-27, and 29 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The term "ridge structure" is indefinite as to its meaning. First, [0021] describes figure 8 as showing "the ridge structure". Second, [0023] refers to "structures 11" as well as "ridge structure 11". This makes it unclear if "ridge structure" is an individual rib, or the collection of ribs.

The term "planar portion" is indefinite as to its meaning. At page 9, line 3 of the August 9, 2007 response applicant indicates that 14 is the planar portion. Claim 14, lines 3-4 stipulates that the ridge structure has this planar portion. [0023] refers to ridge "structures 11". Feature 14 is not part of the ridge structure 11 – as shown in the drawings. Thus applicant's position that 14 is the planar portion contradicts the disclosure. Thus it is deemed that one would not be able to tell what the claim requires.

The term "ridge portion" is indefinite as to its meaning. At page 10, line 14 of the August 9, 2007 response applicant indicates that 16 is the ridge portion. However, [0023] states that 16 is the "top surface" – which seems to be the same thing as the claimed "entire surface". Moreover, [0008] states that the ridge portion has a height H. The top surface 16 has no height – since a surface is substantially a two dimensional

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structure. Based on these things, one would not be able to understand what is meant by "ridge portion".

Claim 14 refers to "the entire surface of the ridge portion, the sidewall portion and the planar portion". Examiner cannot tell whether this is referring the entire surface of all three, or if it means "the side portion, the planar portion and the entire surface of the ridge portion. To look at it another way: there is no antecedent basis for "the entire surface".

Claim 15, 2nd to last line there is a comma that appears to serve a conjunction. It is unclear if that conjunction is "and" or "or" or "without" or something else.

Claim 16: there is confusing antecedent basis for "radio frequency power" - it is unclear if it is the same power mentioned in claim 15.

The above problems occur in other claims – the other claims are indefinite for the same reasons.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 14-20, 24-27, 29 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Examiner could find no support for the ridge structure having a ridge portion, a sidewall portion, and a planar portion. Or a core layer that completely and continuously covers the entire surface of the ridge portion, the sidewall portion and the planar portion.

Claim Rejections - 35 USC § 103

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

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2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nourshargh 4619680 in view of Liu 6117345 and Bazylenko 6154582.

See the prior Office actions for the manner in which the references were applied.

Claims 15-17, 24-26 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nourshargh 4619680 in view of Liu 6117345 and Bazylenko 6154582 as applied to claim 14 above, and further in view of Klein 3850604.

See the prior Office actions for the manner in which the references were applied.

Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nourshargh 4619680 in view of Liu 6117345, Bazylenko, Klein 3850604 and Kestigian 4915810.

See the prior Office actions for the manner in which the references were applied.

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nourshargh 4619680 in view of Liu 6117345 and Bazylenko 6154582 as applied to claim 14 above, and further in view of Makikawa 6615614.

See the prior Office actions for the manner in which the references were applied.

Response to Arguments

Applicant's arguments filed 9 August 07 have been fully considered but they are not persuasive.

As to the IDS – applicant's arguments are no different from before. They are not convincing for the reasons previously given. It is noted that applicant has not clearly pointed out any error in the Office's finding that the IDS was improper. Examiner construes this as acquiescence that the Office's finding is proper.

It is argued that [0023] and [0038] provide support for the limitation that the core layer completely and continuously covers the entire surface of the ridge portion, the sidewall portion and the planar portion. Examiner disagrees. The specification does not teach anything about the planar portion of the ridge structure. The horizontal surface between the ridge structure is not a planar portion of the ridge structure.

It is also argued that figure 1c shows that "the entire surface" is covered. Examiner notes nothing in figure 1c that is disclosed to be "the entire surface".

As to the prior art it is argued that the claimed ridge portion does not refer to any ridge portions, but rather "the" ridge portion of the claimed ridge structure. That the portions are "clearly defined" in the specification and figures. Examiner could find nothing to support these arguments. At most the figures and specification describe an embodiment which portions and a ridge structure that are different from those in the prior art. But the claimed terms are not limited to the specific embodiments. Rather the terms are given their broadest reasonable interpretation. Applicant has not met the standard for being their own lexicographer.

The specification must clearly set forth the definition explicitly and with reasonable clarity, deliberateness and precision. *Teleflex Inc. v. Ficosa North America Corp.*, 63 USPQ2d 1374, 1381 (fed. Cir. 2002), *Rexnord Corp. v. Laitram Corp.* 60 USPQ2d 1851, 1854 (fed. Cir. 2001) and MPEP 2111.01.

There is a heavy presumption that a claim term carries its ordinary meaning which is not rebutted by simply point to embodiments of the invention disclosed in the specification.

CCS Fitness Inc. v. Brunswick Corp., 288 F.3d 1359, 62 USPQ2d 1658 (Fed. Cir. 2002). Applicant is "simply pointing" to embodiments of the portions and structure – this does not rebut the Office's showing that the claims portions can be any portion as indicated in the rejections.

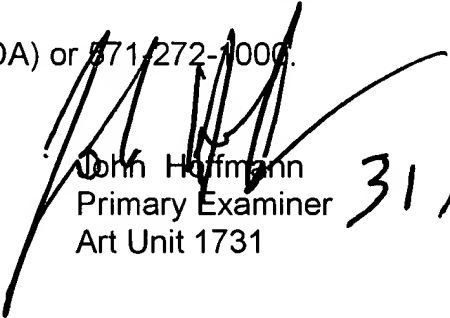
Regarding Nourshargh it is argued that the entire surface "of vertical surface" (sic) is not completely and continuously covered. This does not appear to be very relevant – for at least the reason the claims do not make any requirements on a vertical surface or its entire surface. Also, the phrase "of vertical surface" is used twice – so it is unclear whether such is a typographical error.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is (571) 272 1191. The examiner can normally be reached on Monday through Friday, 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



John Hoffmann
Primary Examiner
Art Unit 1731

31 Aug 2007

jmh